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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/552,390	05/30/2006	Neil Russell Foster	HILLS1150	4759	
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4365 EXECUT		ZALASKY, KATHERINE M			
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			1797		
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/552,390	FOSTER ET AL.			
		Examiner	Art Unit			
		KATHERINE ZALASKY	1797			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)☑	Responsive to communication(s) filed on <u>25 Ja</u>	nuary 2010				
′=	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٥/١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	closed in accordance with the practice under L	x parte Quayle, 1900 C.D. 11, 40	0.0.210.			
Dispositi	on of Claims					
4)🛛	☑ Claim(s) <u>1-12 and 26-31</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
6)🖂	6)⊠ Claim(s) <u>1-12 and 26-31</u> is/are rejected.					
7)						
8)□	Claim(s) are subject to restriction and/or	election requirement.				
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority ι	ınder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2)  Notic 3) Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6) Other:	te			

#### **DETAILED ACTION**

Claims 1-12 and 26-31, as amended 25 January 2010, are currently pending. Claims 13-25 are cancelled.

#### **Non-Compliant Amendment**

1. The listing of claims, submitted 25 January 2010, is non-compliant because of the following: At the bottom of page 4, the claims text reads "Claims 13-26. (Canceled)". Also, page 3 of the claims states, under the "Amendments to the Claims", "Please cancel claims 13-26 without prejudice or disclaimer." However, page 5 still contains claim 26 and its full text. It is unclear whether claim 26 is to be cancelled or is intended to still be pending in the Application. The examiner contacted Matthew Hierholzer on 12 April 2010 to determine the proper status of claim 26; it was determined that claim 26 was intended to remain pending. As such, the text at the bottom of page 4 should read "Claims 13-25. (Canceled)." Appropriate correction is required by the Applicant.

### Claim Interpretation

2. It is noted that **claims 1-12** are directed to an apparatus. Regarding limitations recited in **claims 1-12** which are directed to a manner of operating disclosed apparatus, it is noted that neither the manner of operating a disclosed device nor material or article worked upon further limit an apparatus claim. Said limitations do not differentiate apparatus claims from prior art. See MPEP § 2114 and 2115. Further, it has been held that process limitations do not have patentable weight in an apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim."

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## Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3-4 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Compton (US 4,443,321).

Regarding **claim 1**, Compton discloses an apparatus for dissolving or suspending a substance in a solvent (abstract) comprising:

- an outer chamber, wherein the outer chamber is a pressure vessel (Figure 2, C4/L17-38, autoclave reactor 30)
- an inlet (Figure 2, inlet 36, C4/L17-38)
- a porous chamber within the outer chamber, the porous chamber having a wall
  which allows passage of solvent and the substance dissolved or suspended in
  the solvent (Figure 2, porous container 42, C4/L17-38)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber (Figure 2, C4/L17-38, outlet leading into valve 53) and a turbulence means for creating turbulence within the porous chamber (Figure 2, C4/L17-38, propeller blades 44, motor 46)

Regarding **claim 3**, Compton discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet is in the wall of the outer chamber (Figure 2, inlet 36, C4/L17-38).

Regarding **claim 4**, Compton discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet supplies solvent to the porous chamber and the region between the porous chamber and the outer chamber (Figure 2, C4/L17-38, inlet 36).

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Regarding **claims 27-30**, Compton discloses all of the claim limitations as set forth above. Additionally, the reference discloses that the reactor is an autoclave (C4/L17-38) which may operate at pressures between 500-5000 psig (approx. 34-344 bar) and at a wide range of temperatures (C3/L40-53). Therefore, the apparatus is capable of the functional language recited in **claims 27 and 29-30**.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-7, 11-12 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Pesiri et al. (US 6,916,389).

Regarding **claim 1**, Pesiri et al. discloses an apparatus for dissolving or suspending a substance in a solvent (abstract) comprising:

- an outer chamber, wherein the outer chamber is a pressure vessel (Figure 2, C8/L28-57, pressure vessel 106)
- an inlet (Figure 2, C8/L28-57, inlet 101)
- a porous chamber within the outer chamber, the porous chamber having a wall
  which allows passage of solvent and the substance dissolved or suspended in
  the solvent (Figure 2, C8/L28-57, filter 105)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber (Figure 2, C8/L28-57, outlet 110) and a turbulence means for creating turbulence within the porous chamber (Figure 2, C8/L16-28, substance entering

through inlet at high velocity, upon exiting the inlet opening the rapid expansion of the substance will inherently create turbulence)

Regarding **claim 2**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet in the outer chamber supplies solvent directly to a mouth communicating with the porous chamber (Figure 2, inlet 101, filter 105).

Regarding **claim 3**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet is in the wall of the outer chamber providing dense gas to the region between the porous chamber and the outer chamber (Figure 2, inlet 101, substance entering through the inlet will eventually work its way through the porous chamber and the outer chamber, C8/L28-57).

Regarding **claim 4**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet supplies solvent to the porous chamber and the region between the porous chamber and the outer chamber (Figure 2, inlet 101, substance entering through the inlet will eventually work its way through the porous chamber and the outer chamber, C8/L28-57).

Regarding **claim 5**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is further provided with a longitudinally extending shaft communicating with the solvent inlet of the porous chamber (Figure 2, inlet 101, filter 105).

Regarding **claim 6**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the shaft is porous or perforated (Figure 2, inlet 101, shaft is open on both ends, it has a pore).

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Regarding **claim 7**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the substance is in the porous chamber in the region around the longitudinally extending shaft and the solvent enters the porous chamber through the shaft (Figure 2, inlet 101, filter 105). It is also noted that neither the manner of operating a disclosed device nor material or article worked upon further limit an apparatus claim. Said limitations do not differentiate apparatus claims from prior art. See MPEP § 2114 and 2115. Further, it has been held that process limitations do not have patentable weight in an apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim."

Regarding **claims 11 and 12**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is provided with a plug to hold the substance against the base of the inner chamber, wherein the plug is a planar element abutting the sides of the inner chamber and is held against the substance by a resilient biasing means (Figure 2, C8/L28-57, spring loaded bottom plate 107, spring 108).

Regarding **claim 27**, Pesiri et al. discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the pressure vessel provides a pressure between about 5 to 200 bar (C8/L28-57, capable of pressures between 70 to 1375 bar, operating pressures of 35 to 120 bar).

#### Claim Rejections - 35 USC § 102/103

7. Claims 1-7, 9, 11, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by, or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cham (US 5,744,038) (already of record).

Regarding **claim 1**, Cham discloses an apparatus for dissolving or suspending a substance in a solvent (abstract) comprising:

- an outer chamber (Figure 2, vessel 41, C5/L35-59)
- an inlet (Figure 2, tube 44, C5/L35-59)
- a porous chamber within the outer chamber (Figure 2, dispensing means 46, C5/L35-59), the porous chamber having a wall which allows passage of solvent and the substance dissolved or suspended in the solvent (Figure 2, C5/L35-59)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber (Figure 2, outlet 43, C5/L35-59, C5/L6-11)

While the reference does not explicitly disclose that the outer chamber is a pressure vessel, the instant Application does not have a special definition of "pressure vessel". Therefore, the phrase is given the broadest, reasonable definition.

In this case, the definition provided by Collins English Dictionary, 5th Edition (available at <a href="http://dictionary.reverso.net/english-definition/pressure%20vessel">http://dictionary.reverso.net/english-definition/pressure%20vessel</a>, accessed 13 April 2010) is:

<u>Pressure Vessel:</u> n (Engineering) a vessel designed for containing substances, reactions, etc., at pressures above atmospheric pressure

As Cham discloses a closed vessel which is capable of handling pressures above atmospheric pressure, the reference meets the claim limitation. Nevertheless, even if Cham did not disclose a pressure vessel, it would still be obvious to one having ordinary skill in the art to perform the solvent extraction of plasma in a closed chamber under pressure since it is known in the art that increased pressures can increase the rate of dissolution of a compound in a solvent, thus speeding the entire extraction process (as evidenced by Berard, US 2002/0077375, [0012], [0017], [0024])

Regarding **claim 2**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet in the outer chamber supplies solvent directly to a mouth communicating with the porous chamber (Figure 2, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 3**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet is in the wall of the outer chamber (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 4**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the inlet supplies solvent to the porous chamber and the region between the porous chamber and the outer chamber (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 5**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is further provided with a longitudinally extending shaft communicating with the solvent inlet of the porous chamber (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 6**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the shaft is porous or perforated (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59, liquid is exiting the tube, must have at least one opening).

Regarding **claim 7**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the substance is in the porous chamber in the region around the longitudinally extending shaft (Figure 2, tube 44, inlet 42, lower end 45, C5/L35-59).

Regarding **claim 9**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the turbulence creating means includes a drive means to rotate the porous chamber within the outer chamber (Figure 2, rotating dispersing means 46, C5/L35-59).

Regarding claim 11, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses the apparatus wherein the porous chamber is provided with plug hold the substance against the base of the chamber а to inner (Figure 2, rotating dispersing means 46, C5/L35-62, C4/L64-C5/L11, droplets only exit the chamber laterally, through the side wall, must have a solid bottom).

Regarding **claim 26**, Cham discloses all of the claim limitations as set forth above. Additionally, the reference discloses a method of treatment of the subject comprising the steps of administering to the subject an effective amount of particles of a biologically active substance produced using the apparatus of **claim 1** (C2/L4-27).

### Claim Rejections - 35 USC § 103

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Compton (US 4,443,321), as applied to claim 1 above, and further in view of Hammonds (US 6,531,056).

Regarding **claim 8**, Compton discloses all of the claim limitations as set forth above. While the reference discloses that the turbulence means comprise motor-driven propeller blades, the reference does not disclose that the turbulence means may be a magnetic stirrer with appropriate drive means.

Hammonds discloses an apparatus for dissolving a substance which has an outer container and an inner, porous container with turbulence means wherein the turbulence creating means includes a drive means to drive a magnetic stirrer within the porous chamber (Figure 6, magnetic stir bar 42, motor 50, C7/L31-64).

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It would have been obvious to one having ordinary skill in the art at the time of the invention to substitute the motor-driven propeller-type stirrer of Compton with a magnetic stirrer and drive means, as taught by Hammonds since doing so amounts to nothing more than the simple substitution of one known element for another to obtain predictable results. Additionally, one of ordinary skill in the art would have a reasonable expectation of success in making the substitution and maintaining the quality of mixing desired for this application.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Compton (US 4,443,321), as applied to claim 1 above, and further in view of Osdor (US 3,734,160), Garrett et al. (US 4,452,701), Cole (US 6,000,625), and Ohno (US 2003/0151176).

Regarding **claim 10**, Compton discloses all of the claim limitations as set forth above. While the reference is concerned with the dissolution of a solid material in a solvent, using turbulence-generating means (C4/L16-38, C5/L40-50), the reference only using a propeller-type mixer. Particularly, the reference does not disclose the apparatus where the turbulence creating means further comprise baffles extending from the inner surface of the outer chamber in the region between the porous chamber and the wall of the outer chamber.

Osdor teaches that baffle plates are known to increase turbulence, thus providing additional mixing and dispersal of fluids (C5/L9-13). Garrett et al. teaches that an increase in turbulence is known to increase the rate of dissolution (C2/L6-9). Cole also teaches that if it is noted that there is not enough turbulence in a mixing system that additional baffles should be added to the system (C3/L13-19). Finally, Ohno et al. teaches that baffles on the inner surface of an outer chamber will aid in generating turbulence, which in turn speeds dissolution rates ([0046]).

It would have been obvious to one having ordinary skill in the art at the time of the invention to add baffles to the inner surface of the outer chamber of Compton, as taught by

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Osdor, Garrett et al., Cole and Ohno et al., since doing so will increase turbulence in the vessel, thereby increasing the rate of dissolution and overall, decreasing the process times.

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10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cham (US 5,744,038), as applied to claim 1 above, and further in view of Osdor (US 3,734,160), Garrett et al. (US 4,452,701), Cole (US 6,000,625), and Ohno (US 2003/0151176).

Regarding **claim 10**, Cham discloses all of the claim limitations as set forth above. While the reference discloses that dispersing means in the form of a rotating porous chamber are used to increase dissolution/mixing rates (C3/L26-39), the reference does not disclose the apparatus where the turbulence creating means further comprise baffles extending from the inner surface of the outer chamber in the region between the porous chamber and the wall of the outer chamber.

Osdor teaches that baffle plates are known to increase turbulence, thus providing additional mixing and dispersal of fluids (C5/L9-13). Garrett et al. teaches that an increase in turbulence is known to increase the rate of dissolution (C2/L6-9). Cole also teaches that if it is noted that there is not enough turbulence in a mixing system that additional baffles should be added to the system (C3/L13-19). Finally, Ohno et al. teaches that baffles on the inner surface of an outer chamber will aid in generating turbulence, which in turn speeds dissolution rates ([0046]).

It would have been obvious to one having ordinary skill in the art at the time of the invention to add baffles to the inner surface of the outer chamber of Cham, as taught by Osdor, Garrett et al., Cole and Ohno et al., since doing so will increase turbulence in the vessel, thereby increasing the rate of dissolution and overall, decreasing the process times.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pesiri et al (US 6,916,389).

Regarding **claim 31**, Pesiri et al. discloses an apparatus for dissolving or suspending a substance in a solvent (abstract) comprising:

- an outer chamber (Figure 2, C8/L28-57, pressure vessel 106)
- an inlet (Figure 2, C8/L28-57, inlet 101)
- a porous chamber within the outer chamber, the porous chamber having a wall
  which allows passage of solvent and the substance dissolved or suspended in
  the solvent (Figure 2, C8/L28-57, filter 105)
- an outlet for removing solvent and solution and/or dispersion from the outer chamber (Figure 2, C8/L28-57, outlet 110) and a turbulence means for creating turbulence within the porous chamber (Figure 2, C8/L16-28, substance entering through inlet at high velocity, upon exiting the inlet opening the rapid expansion of the substance will inherently create turbulence)

While the inlet (101) is in the form of a longitudinally extending shaft in fluid communication with the inlet (Figure 2), the reference does not disclose that the shaft is porous along the length of the shaft. Rather, the inlet tube appears to have just a single opening on the end of the tube.

However, inlet tubes which are porous along the length, as opposed to a single opening on the end, are widely used and well known in the art (as evidenced by Green, US 4,476,928, Figures 1 & 2; Pevere et al., US 2,595,979; and McMurphy, US 5,055,185). It would have been obvious to one having ordinary skill in the art at the time of the invention to try using an inlet tube which is perforated along its length as opposed to an inlet tube which has only a single opening on the end since doing so amounts to nothing more than the choice from a finite number of predictable types of inlet tubes, all of which will perform the desired function of adding fluid to the chamber.

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12. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cham (US

<u>5,744,038).</u>

Regarding claim 31, Cham discloses an apparatus for dissolving or suspending a

substance in a solvent (abstract) comprising:

an outer chamber (Figure 2, vessel 41, C5/L35-59)

• an inlet (Figure 2, tube 44, C5/L35-59)

a porous chamber within the outer chamber (Figure 2, dispensing means 46,

C5/L35-59), the porous chamber having a wall which allows passage of solvent

and the substance dissolved or suspended in the solvent (Figure 2, C5/L35-59)

• an outlet for removing solvent and solution and/or dispersion from the outer

chamber and a turbulence means for creating turbulence within the porous

chamber (Figure 2, outlet 43, C5/L35-59, C5/L6-11) Green, US 4,476,928,

Figures 1 & 2; Pevere et al., US 2,595,979; and McMurphy, US 5,055,185

While the inlet (44) is in the form of a longitudinally extending shaft in fluid

communication with the inlet (Figure 2), the reference does not disclose that the shaft is porous

along the length of the shaft. Rather, the inlet tube appears to have just a single opening on the

end of the tube.

However, inlet tubes which are porous along the length, as opposed to a single opening

on the end, are widely used and well known in the art (as evidenced by Green, US 4,476,928,

Figures 1 & 2; Pevere et al., US 2,595,979; and McMurphy, US 5,055,185). It would have been

obvious to one having ordinary skill in the art at the time of the invention to try using an inlet

tube which is perforated along its length as opposed to an inlet tube which has only a single

opening on the end since doing so amounts to nothing more than the choice from a finite

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number of predictable types of inlet tubes, all of which will perform the desired function of adding fluid to the chamber.

Response to Arguments

14. Applicant's arguments filed 25 January 2010 have been fully considered but they are not

persuasive. The Applicant has argued that Cham does not disclose a pressure vessel and

therefore, does not meet every limitation of the claim. However, the reference does disclose a

closed vessel with vents that is capable of operating as a pressure vessel, as explained above.

Unless Applicant has a special definition of "pressure vessel", the general definition given above

will be used to interpret the meaning of the term..

15. Applicant's arguments with respect to the rejections under Smith, Hammonds and Dutton

have been considered but are most in view of the new ground(s) of rejection.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant

is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

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17. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to KATHERINE ZALASKY whose telephone number is (571) 270-7064. The

examiner can normally be reached on 7:30am - 6:00pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor. Vickie Kim can be reached on (571)272-0579. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KZ/

21 April 2010

/Angela Ortiz/ Supervisory Patent Examiner, Art Unit 1797